UNIVERSITY OF BERGEN

CCUS Field Pilot

Carbon Storage During CO_2 Foam EOR

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DEPARTMENT OF PHYSICS AND TECHNOLOGY

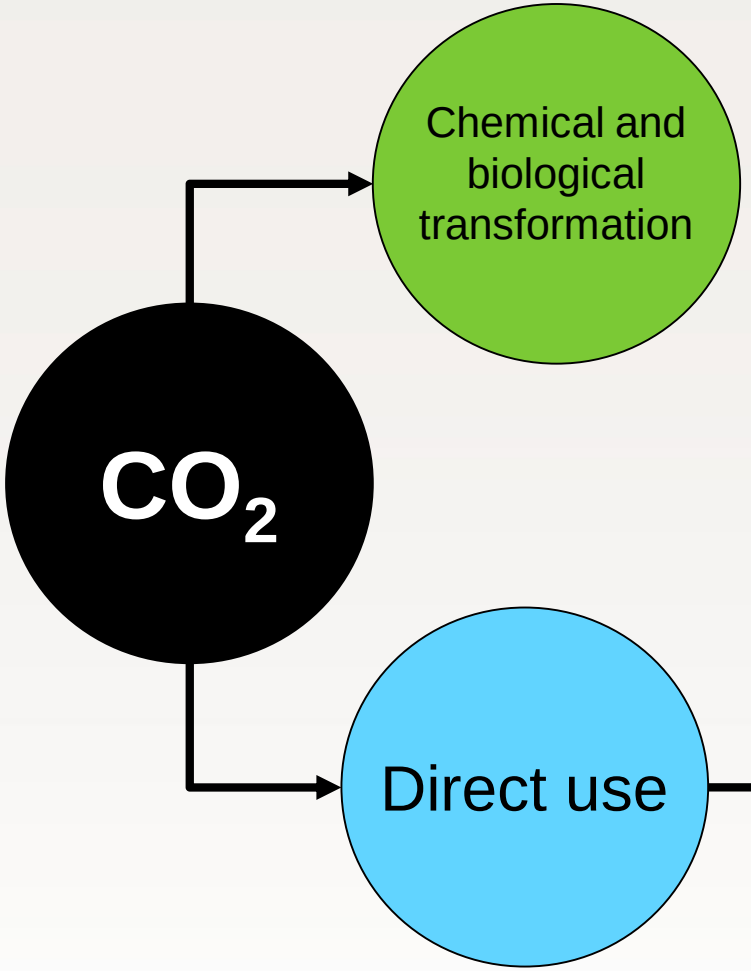
The Headlines

- CO_2 Enhanced Oil Recovery (EOR) can store as much CO_2 in a year as 6,000 Sleipner projects
- CO_2 EOR can recover 150 MSm^3 of oil from the 27 largest oil fields on the NCS
- CCUS can store the vast amounts of CO_2 required to mitigate climate change

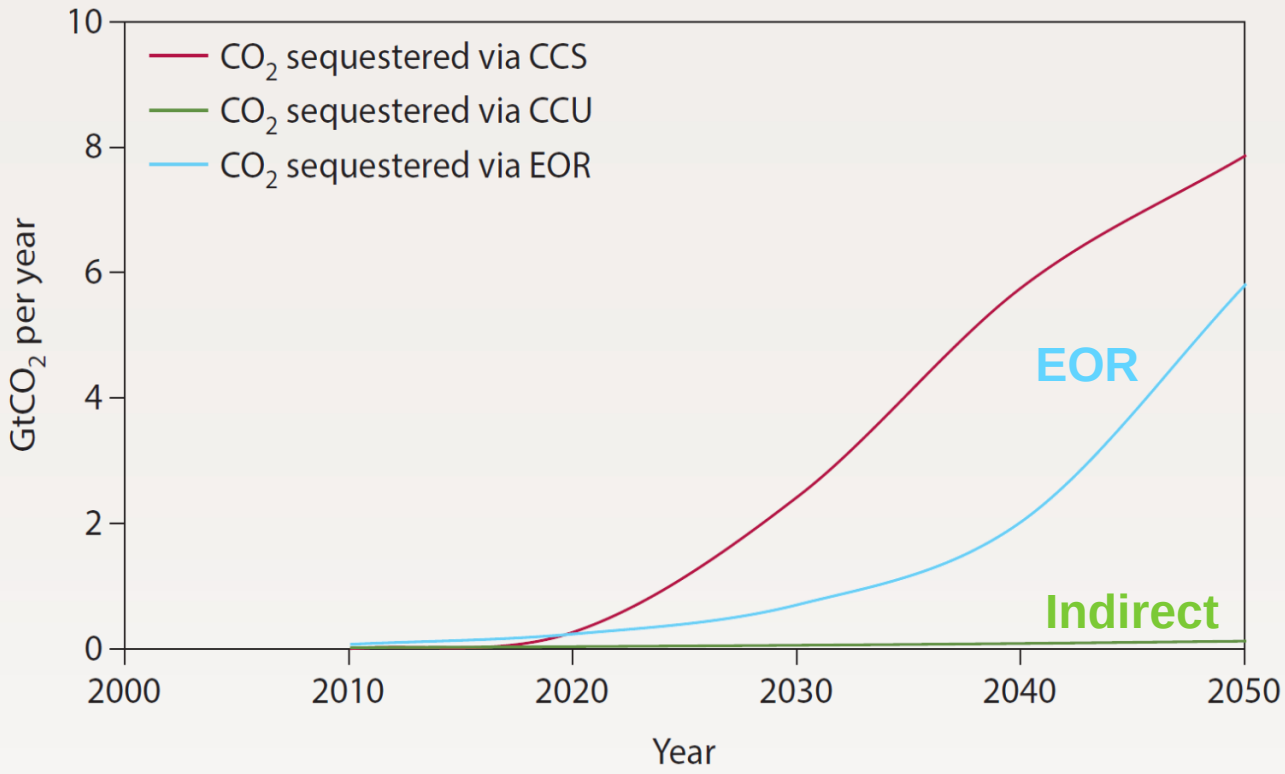
Harald Pettersen / Equinor ASA

x 6000

CO_2 as a Commodity

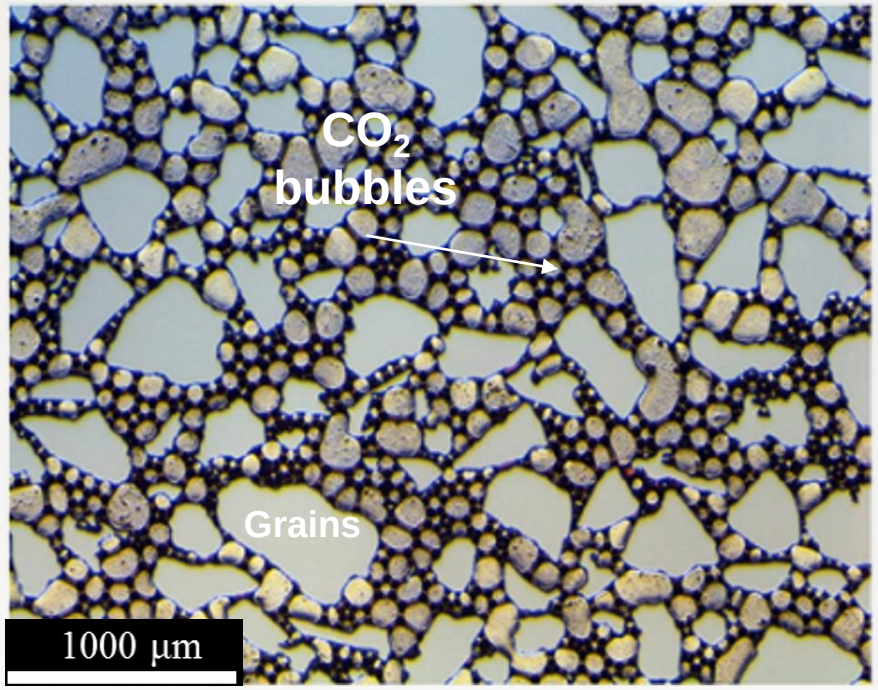


Mac Dowell et al. 2017

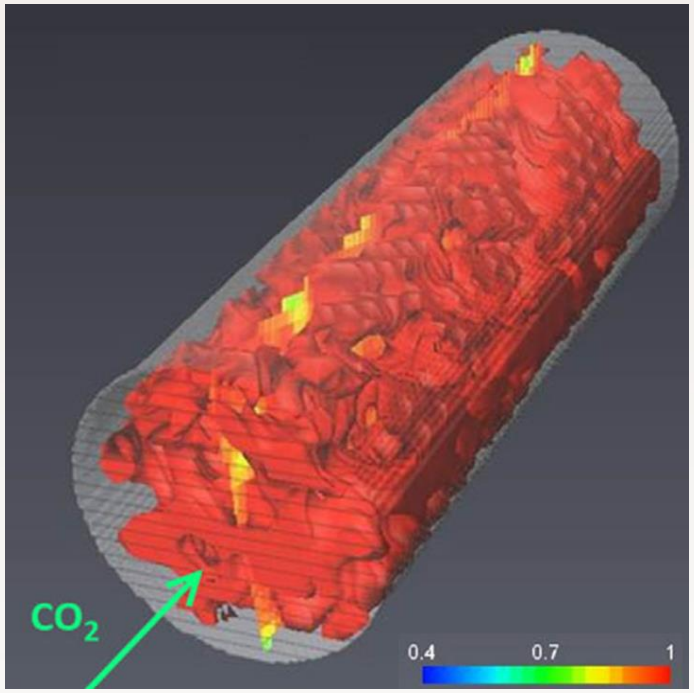


CO_2 EOR Challenges

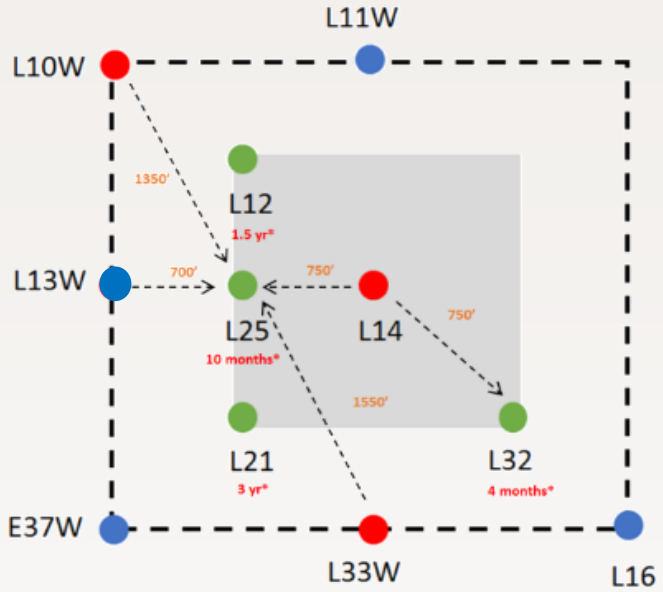
Upscaling CO_2 Foam for EOR and CO_2 Storage



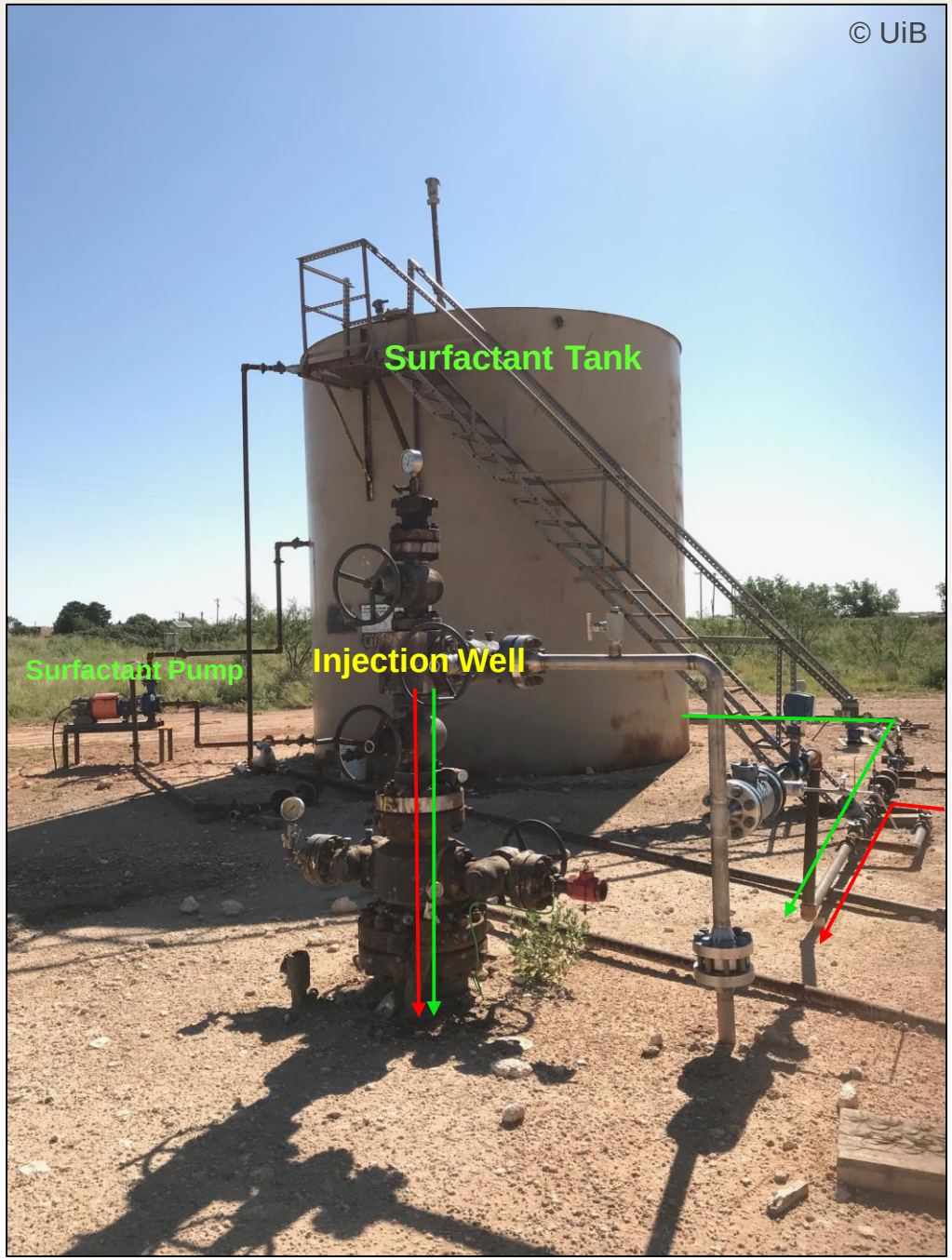
Rognmo et al. 2018



Fernø et al. 2015



Alcorn et al. 2019



Since May 2019

The Bottom Line

- CCS and CCUS are required to reach the Paris Agreement.
- CO_2 as a commodity in EOR can sequester vast amounts of CO_2 to mitigate climate change while simultaneously producing energy.
- Foam for CO_2 mobility control will improve oil recovery, increase revenues, and attract industry to store CO_2.

Acknowledgements

Norwegian Research Council **CLIMIT Program** for financial support under grant **249742** - *CO_2 Storage from Lab to On-Shore Field Pilots Using CO_2 Foam for Mobility Control in CCUS* and **Gassnova** project **618069**.